

## TRANSGENIC ANIMALS THAT PRODUCE HUMAN HEMOGLOBIN

### Abstract of the Disclosure

The invention features transgenic, non-human animals, such as mice, that produce human hemoglobin, for example, hemoglobin A, sickle hemoglobin, fetal hemoglobin, or hemoglobin Kansas Porto Alegre, but fail to produce hemoglobin endogenous to the animal. The invention also features methods for producing human hemoglobin in these animals, human hemoglobins produced by these methods, and methods of using these animals to identify therapeutic substances.